No. 200400101

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

NEXGEN Seed Research, LLC

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) MAY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

FESCUE, TALL

'Ninja 2'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this third day of May, in the year two thousand and seven.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

REPRODUCE LOCALLY. *Include form number and date on all reproductions* — Form Approved - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER
~~Advanta Seeds B.V.~~ NEXGEN Seed Research, LLC
(BT: 4/16/2007)

2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME
ATF800

3. VARIETY NAME
Ninja 2

4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)*
~~Dijkveldestraat 79~~ 33725 Columbus St. SE
~~NL-4421 AJ Kapelle~~ Albany, OR
~~The Netherlands~~ 97322
(BT: 4/16/2007) USA

5. TELEPHONE *(Include area code)*
541-967-8923
~~+31 113 347 900~~

6. FAX *(Include area code)*
541-967-8223
~~+31 113 330 110~~

FOR OFFICIAL USE ONLY

PVPO NUMBER
200400101

FILING DATE
2/9/2004

7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION *(corporation, partnership, association, etc.)*
Incorporated

8. IF INCORPORATED, GIVE STATE OF INCORPORATION
Oregon
~~The Netherlands~~
(BT: 4/16/2007)

9. DATE OF INCORPORATION
7-31-2006
~~12-3-96~~

10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. *(First person listed will receive all papers)*
Kenneth Hignight C/O
Advanta Pacific, LLC
33725 Columbus St.SE
Albany, OR
97322
USA

FEES RECEIVED

FILING AND EXAMINATION FEES:
$ 3,652.00
DATE 2/9/2004

CERTIFICATION FEE:
$ 768.00
DATE 1/8/2007

11. TELEPHONE *(Include area code)*
(541) 967-8923

12. FAX *(Include area code)*
(541) 967-8223

13. E-MAIL

14. CROP KIND *(Common Name)*
Tall Fescue

16. FAMILY NAME *(Botanical)*
Poaceae

15. GENUS AND SPECIES NAME OF CROP
Festuca arundinacea

17. IS THE VARIETY A FIRST GENERATION HYBRID?
☐ YES ☑ NO

18. DOES THE VARIETY CONTAIN ANY TRANSGENES? *(OPTIONAL)*
☐ YES ☑ NO
IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERICALIZATION. _____

19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED
(Follow instructions on reverse)

a. ☑ Exhibit A. Origin and Breeding History of the Variety
b. ☑ Exhibit B. Statement of Distinctness
c. ☑ Exhibit C. Objective Description of Variety
d. ☑ Exhibit D. Additional Description of the Variety *(Optional)*
e. ☑ Exhibit E. Statement of the Basis of the Owner's Ownership
f. ☑ Voucher Sample *(2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository)*
g. ☑ Filing and Examination Fee ($3,652), made payable to "Treasurer of the United States" *(Mail to the Plant Variety Protection Office)*

20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? *(See Section 83(a) of the Plant Variety Protection Act)*
☑ YES *(If "yes", answer items 21 and 22 below)* ☐ NO *(If "no", go to item 23)*

21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES?
☑ YES ☐ NO
IF YES, WHICH CLASSES? ☑ FOUNDATION ☑ REGISTERED ☑ CERTIFIED

22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?
☑ YES ☐ NO
IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS.
2 FOUNDATION 3 REGISTERED 5 CERTIFIED
(If additional explanation is necessary, please use the space indicated on the reverse.)

23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES?
☐ YES ☑ NO
IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. *(Please use space indicated on reverse.)*

24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT *(PLANT BREEDER'S RIGHT OR PATENT)*?
☐ YES ☑ NO
IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. *(Please use space indicated on reverse.)*

25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER		SIGNATURE OF OWNER	
Kenneth Hignight			
NAME *(Please print or type)*		NAME *(Please print or type)*	
Kenneth Hignight			
CAPACITY OR TITLE	DATE	CAPACITY OR TITLE	DATE
Director of Research	1-28-'04 (BT: 11/6/06 per applicant's authorization)	Director of Research	

(See reverse for instructions and information collection burden statement)

ST-470 (04-03) designed by the Plant Variety Protection Office using Word 2002.

Exhibit A:

Origin and Breeding History

'Ninja 2'
<ATF800>**Tall Fescue**
(BT: 10/12/'06)

Origin:

The tall fescue (*Festuca arundinacea*) cultivar 'Ninja 2' <ATF800> (BT: 10/12/2006) traces its origin to a seed source obtained from Rutgers University in 1988. The seed source was obtained under the HEK agreement between Rutgers University and Advanta Seeds. The seed source was labeled R89 and contained half-sib progeny lines. Parental germplasm originated from plants selected in New Jersey, Maryland, Connecticut, Tennessee and Mississippi. They were collected from golf courses, lawns, pastures, parks and other similar turfs between 1961 and 1987. Population improvement projects involved many cycles of phenotypic assortive mating, each followed by single plant progeny trials maintained in stressful turf environments.

Breeding History:

1988: R89 half-sib progeny lines obtained from Rutgers University. This seed was designated as the base population.

1989: The seed was planted in turf trials in the Netherlands.

1990: The best performing lines were increased and sent to Albany, Oregon for further evaluation.

1994: A plant selection field was established in the fall, containing the best performing lines. The single spaced-plant nursery was evaluated on crown density, genetic color, growth habit, number of inflorescence and freedom from stem rust (*Puccinia grammins*).

1995: A crossing population was formed from thirteen plants and designated ATF274.
ATF274 = R89-1 (1 clone) x R89-18 (1 clone) x R89-58 (4 clones) x R89-15 (2 clones) x R89-76 (2 clones) x R89-19 (3 clones).
The population was moved together in the fall and placed in isolation.

1996: The population was harvested in bulk and designated ATF274.

1998: A 1,430 single spaced-plant nursery was established of ATF274. The single spaced plant

nursery was evaluated on crown density, dark genetic color, growth habit, freedom from disease, number of inflorescence and degree of stem rust (*Puccinia graminis*) infection.

1999: Ninety-two clones were selected based on the listed criteria. The clones were planted in isolation before anthesis. The 92 clones were screened for the presence of the fungal endophyte *Neotyphodium coenophialum*. The 92 clones were allowed to interpollinate. Nine of the most attractive clones were harvested in bulk and designated ATF703. In the fall of 1999 a 2,205 single spaced plant nursery was established of ATF703. The single spaced plant nursery was evaluated on crown density, dark genetic color, growth habit, freedom from disease, number of inflorescence and degree of stem rust (*Puccinia graminis*) infection.

2000: Forty-two clones were selected based on the listed criteria. The clones were planted in isolation before anthesis. The clones were harvested in bulk and designated ATF800. ATF800 was trialed in turf near Salem, New Jersey. In the fall of 2000, an increase block of ATF800 was established in Albany, Oregon containing 2,500 plants.

2001: The increase block was harvested in bulk and designated ATF800, breeder seed. A morphological nursery was established in the fall for Plant Variety Protection (PVP) measurements.

2. Breeder Seed Maintenance:

A multiplication was planted in isolation in 2000 in Albany, Oregon. Seed was harvested in bulk in 2001 and designated breeder seed. The seed is maintained in cold storage. Seed propagation is limited to three generations, one each of foundation, registered, and certified.

3. Stability and Uniformity:

"Ninja 2"
<ATF800> has been a stable uniform cultivar over 2 generations. No off-type or variant plants (BT:10/12/2006)
have been observed during the multiplication or reproduction. During the breeder seed multiplication 0.09 % of the plants were removed to improve the uniformity of the population. These types were not observed during the subsequent generations. Turf plots of ATF800 have been uniform.

~~Exhibit B:~~ (BT:5/8/2006)

Exhibit A (addendum): Statement of Stability and Uniformity for 'Ninja 2' <ATF800> (BT: 10/12/2006) Tall Fescue

'Ninja 2' <ATF800> (BT: 10/12/2006) has been a stable uniform cultivar over two generations. No off-type or variant plants have been observed during the multiplication or reproduction. During the breeder seed multiplication 0.09% of the plants were removed to improve the uniformity of the population. The plants that were removed showed less vigor and had poor plant health. It is not known if the lack of vigor was due to environmental factors, genetic factors, or an environment by genetic interaction. These types were not observed during the subsequent generations. Turf plots of 'Ninja 2' <ATF800> (BT: 10/12/2006) have been uniform and stable.

Exhibit B:
Novelty Statement of 'Ninja 2' (BT:10/13/2006) <ATF800> Tall Fescue

The following summary outlines the distinctive characteristics of 'Ninja 2' (BT:10/13/2006) <ATF800>. The novelty of ATF800 is based on the unique combination of these characteristics. ATF800 is most similar to Rebel II, but may be differentiated by using the following criteria:

1) 'Ninja 2' (BT:10/12/2006) <ATF800> has a darker genetic color compared to Rebel II (tables 1A, 1B).

2) The flag leaf characteristics of length and width are shorter for ATF800 compared to Rebel II (tables 1A, 1B).

3) The internode length of ATF800 is longer than Rebel II (tables 1A, 1B).

4) The leaf blade width of ATF800 is reduced compared to Rebel II (tables 1A, 1B).

5) ATF800 has a shorter glume length than Rebel II (tables 2A, 2B).

6) The distance between the lower most whorls of the panicle is reduced for ATF800 compared to Rebel II (tables 2A, 2B, illus. 1).

7) ATF800 has fewer spikelets per panicle than Rebel II (tables 2A, 2B).

8) The panicle length from the lower most whorl to the tip of the panicle of ATF800 is shorter compared to Rebel II (tables 2A, 2B, illus. 1).

9) ATF800 exhibits more plants with a single branch of the lower most whorl compared to Rebel II (tables 2A, 2B, illus. 1).

10) ATF800 produces no plants with a semi-prostrate growth habit compared to Rebel II (tables 3A, 3B).

11) ATF800 has a lower frequency of plants with smooth leaf blade margins than Rebel II (tables 4A, 4B).

12) The seed weight for 'Ninja 2' <ATF800> is greater for 1,000 seeds compared to Rebel II (tables 4A, 4B).

*<ATF800> = 'Ninja 2' (BT:10/12/2006)

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY PROGRAM
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

EXHIBIT C
(TALL & MEADOW FESCUES)

OBJECTIVE DESCRIPTION OF VARIETY
TALL & MEADOW FESCUES
(*Festuca* spp.)

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
(BT: 8/8/06) ~~Advanta Seeds Pacific Inc~~ ~~c/o Kenneth Hignight~~ NEXGEN Seed Research, LLC (BT: 4/16/2007)	ATF800	'Ninja 2' (BT: 10/13/2006)

ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code)	FOR OFFICIAL USE ONLY PVPO NUMBER
~~33725 Columbus St. S.E.~~ ~~Albany, OR~~ ~~97322~~ ~~[illegible]~~ 33725 Columbus St. SE Albany, OR 97322 USA (BT: 11/6/2006) (BT: 4/16/2007)	20040101

Place the appropriate number that describes the varietal characteristics of this variety in the boxes below. Use leading zeroes when necessary (e.g. 089). Characteristics described, including numerical measurements, should represent those that are typical for the variety. Measured data should be for SPACED PLANTS. Royal Horticultural Society or any recognized color fan may be used to determine plant colors. Characteristics marked with an asterisk * are characteristics which should be recorded.

* 1. SPECIES: (With comparison varieties, use varieties within the species of the application variety)

_6__ 1 = *F. arundinacea* (Tall)

Turf Types

1 = Kentucky 31 2 = Rebel 3 = Olympic 4 = Bonanza 5 = Arid 6 = Rebel II

7 = Shortstop 8 = Silverado 9 = Rebel Jr. 10 = Mini Mustang 11 = Crewcut 12 = Bonsai

Forage Types

20 = Kentucky 31 21 = Martin 22 = Forager 23 = Mozark

24 = Kenhy 25 = AU Triumph 26 = Fawn 27 = Cajun

_____ 2 = *F. pratensis* (Meadow)

30 = Admira 31 = Beaumont 32 = Comtessa 33 = Ensign 34 = Trader

* 2. CYTOLOGY:

___42_____ Chromosome Number

3. ADAPTATION: (0 = Not Tested; 1 = Not Adapted; 2 = Adapted)

__0__Transition Zone __2__West __2__ Northeast _____ Other (Specify):_____

* 4. MATURITY: (Date First Headed, 10% of Panicle Emergence)

_5___ Maturity Class 1 = Very early ( ) 2 = AU Triumph 3 = Early (Fawn) 4 = K31, Kenhy 5 = Medium (Rebel)

4. MATURITY: (continued)

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6 = Bonanza 7 = Late (Silverado) 8 = ( ) 9 = Very late

Date Headed _42.50, days after April 1,_____ Location _Albany, Oregon_____

_____ Days earlier than ____
Maturity same as __6__
_____ Days later than ____
} Comparison Variety

---

* 5. MATURE PLANT HEIGHT CM: (Average of 100 culms from crown to top of panicle, if panicle is nodding, straighten)

_93.05__ cm Height

_____ cm Shorter than ___
Height same as _6_
__ __.__ cm Taller than ___
} Comparison Variety

* INTERNODE LENGTH CM: (First internode subtending the flag leaf)

_20.48_ cm Internode Length

_3.78__ cm Shorter than _6_
Length same as ___
__ __.__ cm Longer than ___
} Comparison Variety

* HEIGHT AT EAR EMERGENCE CM: (Flag leaf height from crown to flag leaf node)

_24.75__ cm Height

_____ cm Shorter than ___
Height same as _6_
__ __.__ cm Taller than ___
} Comparison Variety

---

* 6. GROWTH HABIT: (Mature Plants)

_7_ 1 = Prostrate ( ) 3 = Semiprostrate ( ) 5 = Horizontal ( )

7 = Semierect (Rebel) 9 = Erect (Mini Mustang)

---

* 7. RHIZOMES (Psuedo):

__ __.__ mm Length _X_1 = Absent ( ) 2 = Rare (Rebel) 3 = Common ( )

---

* 8. LEAF BLADE: (Tiller leaves/ turf color)

*_7_ Color: 1 = Light green ( ) 3 = Medium light green (1) 5 = Green ( )

7 = Medium dark green ( ) 9 = Very dark green ( )

_5__ Specify rating of comparison variety

*_1_ Anthocyanin: 1 = Absent ( ) 9 = Present ( )

*_1_ Basal Hairs: 1 = Absent ( ) 9 = Present ( )

*_5_ Margins: 1 = Smooth (55%) 5 = Semi-rough (45%) 9 = Rough ( )

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8. LEAF BLADE: (continued)

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*_7_Width Class: 1 = Very coarse ( ) 3 = Coarse ( ) 5 = Medium ( )

7 = Fine ( ) 9 = Very Fine ( )

* TILLER LEAF LENGTH CM: (First leaf subtending the flag leaf)

_29.40_ cm Tiller Leaf Length

_____ cm Shorter than ___

Length same as _6_ } Comparison Variety

__ __.__ cm Taller than ___

* TILLER LEAF WIDTH MM:

_8.30_ mm Tiller Leaf Width

_1.55_ mm Narrower than_6_

Width same as ___ } Comparison Variety

__.__ mm Longer than ___

FLAG LEAF LENGTH CM:

_33.65_ cm Flag Leaf Length

_4.35_ cm Shorter than _6_

Length same as ___ } Comparison Variety

__.__ cm Longer than ___

FLAG LEAF WIDTH MM:

_6.00_ mm Flag Leaf Width

_1.58 mm Narrower than _6_

Width same as ___ } Comparison Variety

__.__ mm Wider than ___

* 9. LEAF SHEATH: (Basal Portion)

*_1_ Anthocyanin (seedling): 1 = Absent (K31) 9 = Present ( )

*_9_ Auricle Hairiness: 1 = Absent ( ) 9 = Present (100%)

* 10. PANICLE: (At seed maturity except where noted.)

*_7_ Shape: 1 = Narrow-tapering (30%) 5 = Ovate ( ) 7 = Oblong (70%) 9 = Other (specify)

*_7_ Type: 1 = Compact (30%) 5 = Intermediate ( ) 7 = Open (70%) 9 = Other (specify)

*_9_ Orientation: 1 = Nodding ( ) 9 = Erect (100%)

*_1_ Branch Pubescence: 1 = Glabrous (95%) 9 = Pubescent ( )

*_1_ Anther Color (At anthesis): 1 = Yellowish Green 2 = Green 3 = Bluish Green

4 = Purplish 5 = Reddish 6= Other (Specify)

*_1_ Glume Color (At anthesis): 1 = Yellowish Green 2 = Green 3 = Bluish Green

4 = Purplish 5 = Reddish 6= Other (Specify)

*_68.63__ cm Panicle Length (from base to tip, if nodding, straighten; after anthesis)

_____ cm Shorter than ___

Length same as _6_ } Comparison Variety

__.__ cm Longer than ___

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* 11. SEED: (With Lemma & Pelea)

*__3080__ mg per 1000 seeds

_____ mg Less than ___
Weight same as ___
__746__ mg More than _6_
} Comparison Variety

PALEA: (Keels or Margins) _5_ Hairs: 1 = Absent ( ) 5 = Short (Missouri 96) 9 = Long ( )

LEMMA: _7_ Hairs: 1 = Absent (Kenhy) 5 = Several ( ) 9 = Many (Missouri 96)

_7.17 mm Lemma Length (Mature)

_____ mm Shorter than ___
Length same as _6_
__.__ mm Longer than ___
} Comparison Variety

_1.46_ mm Lemma Width

__.__ mm Narrower than ___
Width same as _6_
__.__ mm Wider than ___
} Comparison Variety

*AWNS: _9_ AWNS: 1 = Absent ( ) 9 = Present (Falcon) _100_% Plants with awns

_0.94_ mm Awn length (Of those present.)

_____ mm Shorter than ___
Length same as _6_
__.__ mm Longer than ___
} Comparison Variety

12. DISEASE, INSECT, AND NEMATODE REACTION: (0= Not Tested 1= Least Resistant 9= Most Resistant)

_0_ Melting-out *Drechslera poae*
_0_ Leaf Spot *D. siccans*
_0_ Net Blotch *D. dictyoides*
_0_ Brown Patch *Rhizoctonia solani*
_0_ C. Leaf Spot *Cercospora fectucae*
_0_ Pink Snow Mold *Gerlachia nivalis*
_0_ Silver Top *F. tricinctum, F. roseum*

_0_ Blind Seed *Gloeotinia temulenta*
_0_ Dollar Spot *Lanzia, Mollerdiscus* spp.
_0_ Stem Rust *Puccinia graminis*
_0_ T. Blight *Typhula incarnata*
_0_ Pythium Blight *Pythium* spp.
_0_ Powdery Mildew *Erysiphe graminis*
_0_ Crown Rust *Puccinia coronata*

___ Other Disease _____
___ Other Insect _____
___ Other Nematode _____

13. ENVIRONMENTAL STRESS

_6_ Drought Stress 1 = Susceptible ( ) 5 = Tolerant ( ) 9 = Resistant ( )
___ Shade Stress 1 = Susceptible ( ) 5 = Tolerant ( ) 9 = Resistant ( )

13. ENVIRONMENTAL STRESS: (continued)

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_6_ Winter Stress 1 = Susceptible ( ) 5 = Tolerant ( ) 9 = Resistant ( )

14. GIVE VARIETY OR VARIETIES THAT MOST CLOSELY RESEMBLE THE APPLICATION VARIETY. For the following characteristics, indicate the degree of resemblance with the following scale:

1 = Application variety is less than comparison variety 2 = Same as 3 = More than, better, greater, darker, etc.

Character	Varieties	Rating	Character	Varieties	Rating
Leaf Width	Rebel II	1	Leaf Color	Rebel II	3
Panicle Color	Rebel II	2	Panicle Shape	Rebel II	2
Seed Size	Rebel II	3	Cold Injury	Rebel II	2
Winter Color	Rebel II	2	Heat	Rebel II	2
Disease	Rebel II	3			

* 15. EXPERIMENTAL: Give a brief summary of the experimental design utilized to collect the data used on this form. Cultural conditions, number of plants measured and plant spacing must be specified.

A morphological nursery designated 01PVPFA was established in September 2001, in Albany, Oregon. Experimental design consisted of 20 entries; 4 replications per entry; 20 plants per replication; for a total of 80 plants per entry for tables 1A, 1B. Experimental design consisted of 20 entries; 3 replications per entry; 20 plants per replication; for a total of 60 plants per entry for tables 2 - 4. KY-31, Rebel II, Plantation and Tulsa were used as standards. Plants were established on 2.5 foot centers with a skip row between replications and between entries.

The nursery received 30 pounds of nitrogen per acre rate following establishment and 50 pounds of nitrogen per acre per year in 2001 and 2002. The fertilizer source was 15 - 15 - 15 and was applied as a split application with ½ applied in the spring and ½ in the autumn. The nursery was sprayed twice each spring, 3 weeks between applications, with Tilt (2oz/acre rate), to prevent stem rust. One pound of Karmex per acre rate was applied during the late summer to prevent emergence of volunteer seedlings.

Data was analyzed using analysis of variance for a randomized complete block design. Means were calculated for each replication and then analyzed.

Additional Description

'Ninja 2'
<ATF800>Tall Fescue
(BT: 10/12/2006)

'Ninja 2'
<ATF800>is an improved turf-type tall fescue. It has a shorter growth habit (tables 1A, 1B) than previously released tall fescue cultivars, such as KY-31. ATF800 has a medium maturity with a heading date later than KY-31 (tables 1A, 1B). ATF800 exhibits a darker genetic color compared to the cultivars KY-31, Rebel II and Tulsa (tables 1A, 1B). The length of the flag leaf is shorter for ATF800 compared to KY-31, Rebel II and Tulsa (tables 1A, 1B). ATF800 has a narrower flag leaf width compared to KY-31, Rebel II and Plantation (tables 1A, 1B). ATF800 has a shortened internode length of the flag leaf compared to Rebel II and Plantation (tables 1A, 1B). The leaf blade width is shorter for ATF800 than KY-31, Rebel II and Plantation(tables 1A, 1B). The length of the panicle from the lower most whorl to the apex is shorter for ATF800 compared to KY-31, Rebel II and Tulsa (tables 2A, 2B). ATF800 has fewer spikelets per panicle than KY-31, Rebel II, Plantation and Tulsa (tables 2A, 2B). The distance between the lower most whorls is shorter for ATF800 than KY-31 and Rebel II (tables 2A, 2B, illus. 1).

Visual characteristics can also differentiate ATF800 from previously released cultivars. The number of branches of the lower most whorl is fewer for ATF800 compared to KY-31 and Rebel II, but more than Plantation and Tulsa (tables 3A, 3B, illus, 1). ATF800 produces a higher frequency of plants with an erect growth habit compared to KY-31 and Tulsa, but less than Plantation and Rebel II (tables 3A, 3B). The presence of dark pigmentation at the nodes is more frequent in ATF800 than Plantation and Tulsa (tables 4A, 4B). The seed weight of ATF800 is greater compared to Rebel II, Plantation and Tulsa (tables 4A, 4B). 'Ninja 2' ATF800 expresses fewer plants with smooth leaf blade margins compared to Rebel II, Plantation and Tulsa (tables 4A, 4B).
(BT: 10/12/2006)

Table 1A 2002 Morphological Data

Cultivar	Genetic Color	Heading Date (days after April 1)	Anthesis Date (days after April 1)	Mature Plant Height (cm)	Plant Width (cm)	Panicle Length (cm)	Flag Leaf Length (cm)	Flag Leaf Width (mm)	Flag Leaf Height (cm)	Flag Leaf Sheath Length (cm)	Flag Leaf Internode Length (cm)	Leaf Blade Length (cm)	Leaf Blade Width (mm)	Leaf Blade Height (cm)	Leaf Sheath Length (cm)
Ninja 2'															
(BT:10/13/06) ATF8007	5.61	42.50	67.25	93.05	10.78	68.63	33.65	6.00	24.75	22.25	20.48	29.40	8.30	17.05	12.10
SBL	5.71	36.25	64.75	95.18	11.03	73.18	35.28	6.70	21.93	21.83	17.25	30.05	8.85	16.48	11.73
SBM	5.58	39.00	65.25	88.85	11.00	67.83	32.45	6.03	21.05	20.85	17.35	35.08	8.60	15.40	11.63
RB3	6.21	38.25	65.00	86.90	10.83	69.03	32.35	6.98	17.88	20.33	15.15	27.65	9.23	13.90	11.03
RB2	5.90	35.50	64.50	89.40	10.40	68.85	33.45	6.78	19.45	21.00	16.68	28.25	8.93	15.03	11.25
ATF799	5.89	43.75	66.75	83.28	10.45	62.83	29.08	6.00	20.38	19.05	17.10	26.08	8.38	14.13	10.85
ATF802	5.66	40.00	65.75	91.48	11.13	72.38	34.15	5.98	18.75	22.18	16.48	27.85	8.70	13.58	10.98
ATF704S1	5.43	38.00	65.75	97.10	11.18	70.98	35.03	6.38	25.05	22.70	20.35	29.88	8.38	17.63	12.33
ATF803	5.59	39.50	66.75	92.48	10.60	72.73	36.48	7.45	19.63	22.10	16.65	31.48	9.35	15.10	11.83
ATF805	6.13	45.75	69.75	73.20	8.75	58.40	28.48	5.78	14.68	18.38	13.38	23.53	8.03	10.95	9.60
KY-31	3.86	35.25	65.25	122.95	11.23	83.73	48.43	7.68	37.30	32.63	26.38	44.10	11.05	31.05	18.65
Rebel II	5.04	41.25	66.50	88.18	10.60	68.45	38.00	7.58	19.35	23.10	16.70	32.75	9.85	15.63	12.48
Plantation	5.69	40.25	66.00	89.23	11.03	68.00	35.28	6.73	20.95	22.15	17.13	31.20	9.25	16.35	12.55
Tulsa	5.09	40.50	66.50	97.98	11.00	72.35	37.35	6.48	24.53	23.40	19.78	32.40	8.63	18.78	13.00
018	6.06	40.50	66.00	88.15	11.15	68.08	33.43	6.73	20.28	20.98	16.90	28.40	8.80	14.85	11.45
(DT:10/13/06) LSD (.05)	0.21	2.01	1.42	5.38	0.90	4.02	2.49	0.63	2.47	1.31	1.56	3.65	0.60	1.94	0.94
CV	3.31	4.32	1.82	4.89	7.02	4.83	5.97	8.27	9.33	4.96	7.18	10.05	5.81	9.83	6.54

■ Cultivar under evaluation
■ Significant difference over two years one location.
■ Significant difference over one year one location.
Measurements taken in Albany, Oregon
4 reps; 20 plants/rep = 80 data points

2004-01-02

Table 1B 2003 Morphological Data

Cultivar	Genetic Color	Heading Date (days after April 1)	Anthesis Date (days after April 1)	Mature Plant Height (cm)	Plant Width (cm)	Panicle Length (cm)	Flag Leaf Length (cm)	Flag Leaf Width (mm)	Flag Leaf Height (cm)	Flag Leaf Sheath Length (cm)	Flag Leaf Internode Length (cm)	Leaf Blade Length (cm)	Leaf Blade Width (mm)	Leaf Blade Height (cm)	Leaf Sheath Length (cm)
'Ninja 2'															
(BT:10/12/05) ATF8007	5.76	58.50	59.83	118.05	28.50	76.53	42.60	4.85	39.60	27.40	27.35	41.48	5.40	28.30	17.78
SBL	5.58	51.25	56.65	115.93	28.25	77.35	46.50	5.10	37.90	28.90	24.98	42.50	5.85	31.43	17.50
SBM	5.64	57.25	59.65	111.50	27.25	71.43	43.60	5.10	38.95	26.53	24.98	40.60	6.15	31.45	16.68
RB3	5.96	55.50	58.35	115.60	27.75	76.43	44.40	5.38	38.13	27.10	24.75	43.63	6.05	29.58	17.10
RB2	6.06	52.00	56.48	113.75	28.00	73.23	44.68	5.00	39.88	26.63	24.70	41.95	5.38	30.45	17.50
ATF799	5.90	60.75	61.98	107.50	27.25	67.68	38.88	4.40	38.75	23.28	25.20	38.25	5.18	28.65	16.28
ATF802	5.71	58.50	60.60	120.35	27.50	80.30	48.10	5.15	38.65	29.05	25.75	42.88	5.88	29.43	17.73
ATF704S1	5.43	51.25	56.50	118.13	27.50	76.93	45.05	5.10	39.85	27.65	26.45	40.13	5.70	28.73	17.38
ATF803	5.53	58.00	60.30	120.65	27.00	78.18	46.43	5.25	42.98	28.08	24.80	45.03	6.00	33.50	18.43
ATF805	6.34	58.50	60.83	110.10	25.75	75.38	42.53	5.15	34.83	25.80	22.85	39.85	5.90	26.30	16.43
KY-31	2.99	46.00	54.28	145.90	27.50	89.48	59.13	7.18	37.30	37.18	28.05	61.03	9.05	51.40	24.68
Rebel II	5.11	57.75	59.08	118.63	27.75	82.08	50.90	6.03	36.43	28.98	24.58	48.60	6.33	28.58	18.98
Plantation	5.71	57.75	60.28	118.68	27.75	77.60	46.80	5.68	40.40	27.85	24.75	44.43	6.78	31.53	18.33
Tulsa	5.10	57.25	59.98	118.65	27.00	79.68	47.78	5.18	39.13	28.55	25.48	43.20	5.45	29.28	17.85
018	6.10	59.50	60.73	108.98	27.00	70.58	44.63	5.25	38.13	26.70	23.83	42.80	6.25	29.10	16.83
(BT:10/12/06) LSD(.05)	0.25	2.47	1.15	4.51	1.77	3.91	2.13	0.78	3.57	1.44	1.16	2.42	0.92	3.55	1.06
CV	3.90	3.74	1.65	3.25	5.47	4.33	3.90	12.72	7.51	4.34	3.86	4.67	12.97	9.61	4.99

■ Cultivar under evaluation
■ Significant difference over two years one location.
■ Significant difference over one year one location.
Measurements taken in Albany, Oregon
4 reps; 20 plants/rep = 80 data points

Table 2A 2002 Laboratory Morphological Data

Cultivar	Lemma Length (mm)	Lemma Width (mm)	Lemma Awn Length (mm)	Palea Length (mm)	Palea Width (mm)	Glume Length (mm)	Length of Panicle from Lower Most Whorl to Tip (cm)	Spikelets per Panicle	Florets per Spikelet	Spikelet Length (mm)	Length of Longest Whorl (mm)	Distance Between Lower Most Whorls	Number of Spikelets on the Longest Whorl
'Ninja 2'													
(BT:10/12/06) <ATF800>	7.17	1.46	0.94	6.65	1.13	4.98	18.77	70.00	7.33	13.20	80.07	46.87	11.73
SBL	6.85	1.46	1.06	6.45	1.15	5.36	20.53	80.00	7.10	13.00	89.57	51.30	14.83
SBM	6.83	1.55	1.08	6.41	1.17	5.08	19.60	80.00	7.20	13.07	86.10	47.60	14.50
RB3	6.80	1.55	0.91	6.32	1.19	5.15	18.47	76.67	7.53	13.17	76.40	46.43	13.50
RB2	6.46	1.56	0.86	6.08	1.22	5.12	17.87	76.67	7.17	12.47	76.33	45.23	12.83
ATF799	6.55	1.47	0.84	6.19	1.15	5.00	17.23	72.33	7.50	12.87	74.47	42.80	13.80
ATF802	7.00	1.55	0.83	6.34	1.21	5.31	20.60	82.67	8.20	13.50	92.07	52.87	15.27
ATF704S1	7.14	1.46	0.94	6.61	1.14	5.57	19.07	73.67	7.47	13.13	79.70	47.17	12.10
ATF803	6.77	1.49	0.82	6.28	1.10	5.31	21.73	85.33	7.67	13.07	101.13	54.20	13.80
ATF805	6.73	1.51	0.88	6.37	1.11	5.29	16.93	80.67	8.10	13.50	71.93	41.53	13.97
KY-31	7.74	1.62	0.98	7.25	1.26	5.77	29.33	116.33	8.07	15.13	111.17	67.90	16.33
Rebel II	6.77	1.45	1.07	6.35	1.09	5.35	21.67	98.00	6.90	12.53	91.77	53.83	14.57
Plantation	6.72	1.45	0.80	6.33	1.14	4.83	20.43	97.33	7.17	12.63	87.10	48.40	15.50
Tulsa	6.72	1.48	0.78	6.25	1.14	4.87	21.60	93.67	7.27	12.50	89.80	50.77	13.87
018	7.11	1.49	0.92	6.45	1.12	5.00	20.43	85.00	7.63	13.53	86.83	48.17	16.30
(BT:10/12/06) LSD(.05)	0.31	0.08	0.17	0.23	0.08	0.34	2.31	11.18	0.85	0.91	13.15	5.49	2.95
CV	3.25	3.94	12.97	2.64	5.23	4.83	8.32	9.84	8.43	5.08	11.21	8.11	15.44

■ Cultivar under evaluation
■ Significant difference over two years one location.
■ Significant difference over one year one location.
Measurements taken in Albany, Oregon
3 reps; 20 plants/rep = 60 data points

Table 2B 2003 Laboratory Morphological Data

Cultivar	Lemma Length (mm)	Lemma Width (mm)	Lemma Awn Length (mm)	Palea Length (mm)	Palea Width (mm)	Glume Length (mm)	Length of Panicle from Lower Most Whorl to Tip (cm)	Spikelets per Panicle	Florets per Spikelet	Spikelet Length (mm)	Length of Longest Whorl (mm)	Distance Between Lower Most Whorls	Number of Spikelets on the Longest Whorl
(BT:10/12/'06) 'Ninja 2'													
ATF8007	6.30	1.42	1.15	6.16	1.18	4.44	23.10	77.67	4.87	10.43	81.70	57.10	11.37
SBL	7.06	1.49	1.47	6.39	1.20	5.17	26.13	92.00	5.63	11.43	101.40	67.87	16.83
SBM	7.15	1.48	1.51	6.53	1.18	4.98	25.67	89.67	5.57	11.47	108.50	63.93	17.07
RB3	7.16	1.45	1.48	6.50	1.22	5.07	26.23	92.67	5.27	11.27	100.10	66.67	17.93
RB2	6.88	1.43	1.21	6.22	1.19	4.95	25.87	99.33	5.13	10.73	104.77	63.30	19.57
ATF799	6.52	1.46	1.15	6.10	1.17	4.72	22.50	85.33	5.23	10.50	89.47	55.83	15.93
ATF802	6.47	1.37	1.37	6.07	1.17	4.80	27.43	92.33	5.60	10.53	111.00	68.57	18.27
ATF704S1	6.92	1.57	1.55	6.59	1.29	5.17	26.37	82.67	5.60	11.40	104.23	68.03	15.40
ATF803	6.20	1.60	1.35	6.18	1.20	4.98	28.83	97.67	4.97	10.47	126.50	69.93	17.30
ATF805	6.06	1.42	1.55	6.08	1.09	4.79	24.57	103.00	5.53	10.50	85.17	58.53	16.57
KY-31	7.28	1.55	1.59	7.13	1.32	5.41	34.67	122.67	6.23	13.23	123.40	80.83	17.93
Rebel II	6.75	1.47	1.80	6.21	1.18	5.00	29.47	108.00	4.53	10.63	117.07	71.40	18.47
Plantation	6.41	1.45	1.31	6.14	1.19	4.40	27.30	105.33	4.80	10.13	106.87	65.43	17.37
Tulsa	6.33	1.42	1.39	5.97	1.24	4.51	27.67	100.67	4.77	9.87	101.97	68.40	16.97
018	6.45	1.41	1.52	6.08	1.15	4.51	25.93	92.33	5.37	10.60	96.53	63.23	16.90
(BT:10/12/'06) LSD(.05)	0.70	0.10	0.27	0.31	0.10	0.37	1.81	8.48	0.47	0.79	11.74	5.46	2.80
CV	7.74	4.86	13.52	3.64	6.31	5.60	4.93	6.51	6.53	5.28	8.27	6.05	12.18

■ Cultivar under evaluation
▩ Significant difference over two years one location.
▩ Significant difference over one year one location.
Measurements taken in Albany, Oregon
3 reps; 20 plants/rep = 60 data points

Panicle Type Inflorescence

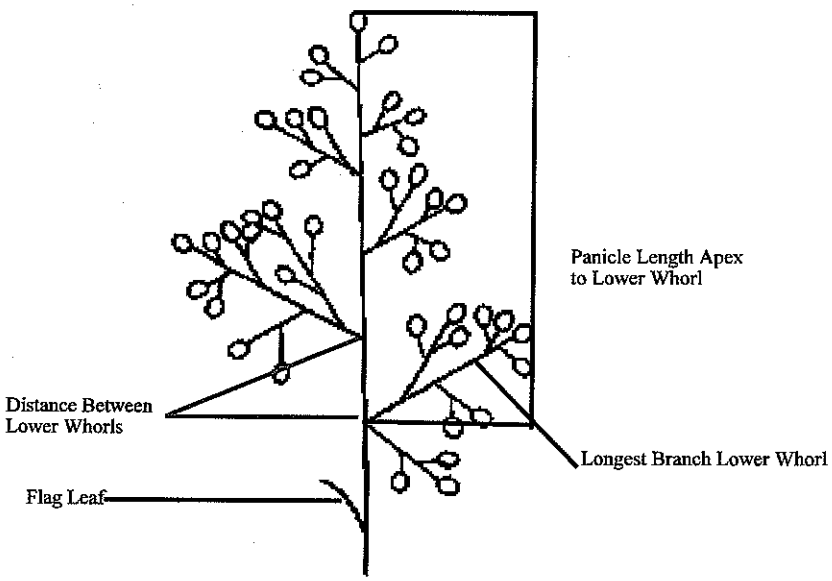

Illustration 1.

Table 3A 2002 Additional Morphological Measurements of the Panicle

Cultivar	Growth Habit at Anthesis % Semi-Prostrate	Growth Habit at Anthesis % Horizontal	Growth Habit at Anthesis % Semi-Erect	Growth Habit at Anthesis % Erect	Anther Color % Purple	Panicle Color % Purple	Lemma Awn % Present	Glume Color % Purple	Panicle Orientation % Nodding	Panicle Shape % Oblong	Panicle Type % Open	Panicle Branch Lower Whorl =1	Panicle Branch Lower Whorl =2	Panicle Branch Lower Whorl >3	Panicle Branch Pubescence % Present
(ersion/date) Ninja 2'															
<ATF8007>	0	32	53	15	3	45	100	5	0	43	43	18	78	2	0
SBL	0	20	45	35	5	20	100	2	3	60	60	30	65	5	3
SBM	0	2	56	42	5	27	100	3	2	65	65	20	75	5	8
RB3	0	28	42	30	2	18	100	0	0	72	72	30	67	3	7
RB2	0	12	55	33	10	20	100	2	0	67	67	20	75	5	2
ATF799	0	17	58	25	10	43	100	0	0	38	38	40	55	5	12
ATF802	3	25	58	14	7	50	100	3	0	53	53	23	75	2	2
ATF704S1	0	22	71	7	3	20	100	3	0	47	47	23	75	2	5
ATF803	2	50	45	3	0	32	100	2	5	30	30	8	83	9	3
ATF805	0	20	62	18	3	23	100	2	0	27	27	15	82	3	3
KY-31	10	62	28	0	3	7	100	0	15	23	23	8	87	5	18
Rebel II	3	17	48	32	3	40	100	0	0	48	48	9	80	11	3
Plantation	0	8	64	28	5	35	100	0	0	50	50	13	85	2	12
Tulsa	2	34	57	7	3	32	100	3	3	45	45	10	88	2	2
018	0	5	57	38	5	25	100	0	0	45	45	40	60	0	7

■ Cultivar under evaluation
Measurements taken in Albany, Oregon
3 reps; 20 plants/rep = 60 data points

Table 3B 2003 Additional Morphological Measurements of the Panicle

Cultivar	Growth Habit at Anthesis % Semi-Prostrate	Growth Habit at Anthesis % Horizontal	Growth Habit at Anthesis % Semi-Erect	Growth Habit at Anthesis % Erect	Anther Color % Purple	Panicle Color % Purple	Lemma Awn % Present	Glume Color % Purple	Panicle Orientation % Nodding	Panicle Shape % Oblong	Panicle Type % Open	Panicle Branch Lower Whorl =1	Panicle Branch Lower Whorl =2	Panicle Branch Lower Whorl >3	Panicle Branch Pubescence % Present
'Ninja2' (est: 10/12/09) <ATF800>	0	41	52	7	18	0	100	3	0	70	70	21	68	11	5
SBL	0	22	45	33	2	12	100	3	0	65	65	34	59	7	4
SBM	0	4	55	41	2	7	100	2	0	62	62	24	68	9	2
RB3	0	25	47	28	2	3	100	0	0	66	66	39	49	13	0
RB2	0	11	57	32	2	3	100	0	0	72	72	54	44	2	1
ATF799	0	33	54	13	3	12	100	3	0	66	66	36	54	10	1
ATF802	5	36	53	6	2	17	100	8	0	77	77	38	60	3	1
ATF704S1	0	25	70	5	2	5	100	5	0	81	81	25	71	4	2
ATF803	6	49	43	2	2	12	100	5	0	70	70	24	71	6	1
ATF805	0	17	67	16	0	5	100	0	0	55	55	31	59	10	2
KY-31	12	55	33	0	0	0	100	7	0	100	100	15	75	10	5
Rebel II	3	20	42	35	3	8	100	0	0	80	80	19	64	18	0
Plantation	0	3	72	25	0	13	100	3	2	72	72	15	76	9	6
Tulsa	4	33	60	3	3	10	100	0	0	80	80	35	59	6	1
018	0	2	75	23	0	3	100	0	0	69	69	33	59	9	0

■ Cultivar under evaluation
Measurements taken in Albany, Oregon
3 reps; 20 plants/rep = 60 data points

Table 4A

2002 Additional Morphological Measurements

Cultivar	Anthocyanin Present in the Leaf Blade % Purple	Leaf Blade Margin Roughness to the Touch % Smooth	Leaf Blade Margin Roughness to the Touch % Semi-Rough	Leaf Blade Margin Roughness to the Touch % Rough	Leaf Blade Margin Hairs % Present	Leaf Sheath Auricle Hairs % Present	Rhizomes % Present	Lemma Hairs % Present	Palea Hairs % Present	Node Color % Distinct	Seed Weight (mg/1,000 seeds)
(BT; 10/12/06) Ninja 2											
ATF600	0	7	22	71	100	100	0	100	100	32	3080
SBL	0	35	33	32	97	93	0	100	100	15	2578
SBM	0	35	23	42	98	98	0	95	100	2	3194
RB3	0	18	35	47	100	97	0	98	100	5	3977
RB2	0	28	22	48	98	95	0	97	100	3	2103
ATF799	0	25	22	53	100	97	0	100	100	7	2350
ATF802	0	33	24	43	100	98	0	98	100	30	2638
ATF704S1	0	30	32	38	100	97	0	100	100	17	2562
ATF803	0	15	18	67	100	97	0	100	100	28	3195
ATF805	0	10	12	78	100	95	0	100	100	12	3006
KY-31	0	58	22	18	100	95	0	100	100	30	2924
Rebel II	0	12	15	73	100	98	0	100	100	10	2334
Plantation	0	15	25	60	100	100	0	100	100	3	2458
Tulsa	0	47	16	37	100	98	0	100	100	15	2347
018	0	13	12	75	100	100	0	100	100	5	2338

■ Cultivar under evaluation
Measurements taken in Albany, Oregon
3 reps; 20 plants/rep = 60 data points

Table 4B

2003 Additional Morphological Measurements

Cultivar	Anthocyanin Present in the Leaf Blade % Purple	Leaf Blade Margin Roughness to the Touch % Smooth	Leaf Blade Margin Roughness to the Touch % Semi-Rough	Leaf Blade Margin Roughness to the Touch % Rough	Leaf Blade Margin Hairs % Present	Leaf Sheath Auricle Hairs % Present	Rhizomes % Present	Lemma Hairs % Present	Palea Hairs % Present	Node Color % Distinct	Seed Weight (mg/1,000 seeds)
'Ninja2' (BT: (10/12/2006) <ATF600>	0	55	43	2	92	90	0	100	100	5	3114
SBL	0	85	15	0	99	90	0	100	100	10	2580
SBM	0	78	17	5	100	92	0	100	100	5	3190
RB3	0	78	20	2	95	92	0	99	100	2	3973
RB2	0	88	12	0	96	97	0	100	100	3	2109
ATF799	0	72	18	10	92	91	0	100	100	5	2345
ATF802	0	83	17	0	99	90	0	100	100	18	2702
ATF704S1	0	77	18	5	95	92	0	99	100	20	2564
ATF803	0	70	23	7	99	95	0	100	100	10	3139
ATF805	0	82	15	3	96	90	0	99	100	0	3070
KY-31	0	55	37	8	96	94	0	100	100	32	2937
Rebel II	0	85	12	3	97	91	0	99	100	5	2310
Plantation	0	72	20	8	97	92	0	100	100	2	2463
Tulsa	0	90	7	3	97	96	0	100	100	8	2352
018	0	77	22	2	96	91	0	99	100	2	2345

■ Cultivar under evaluation
Measurements taken in Albany, Oregon
3 reps; 20 plants/rep = 60 data points

REPRODUCE LOCALLY. Include form number and edition date on all reproductions. FORM APPROVED - OMB No. 0581-0055

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued *(7 U.S.C. 2421)*. The information is held confidential until the certificate is issued *(7 U.S.C. 2426)*.

1. NAME OF APPLICANT(S)	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
NEXGEN Seed Research, LLC	ATF800	Ninja 2
4. ADDRESS *(Street and No., or R.F.D. No., City, State, and ZIP, and Country)*	**5. TELEPHONE** *(Include area code)*	**6. FAX** *(Include area code)*
33725 Columbus St. SE Albany, OR 97322 USA	(541) 967-8923	(541) 967-8223
	7. PVPO NUMBER ~ #200400101	

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. **If no, please explain.** ☑ **YES** ☐ **NO**

9. Is the applicant (individual or company) a U.S. national or a U.S. based company? **If no, give name of country.** ☑ **YES** ☐ **NO**

10. Is the applicant the original owner? ☑ **YES** ☐ **NO** **If no, please answer one of the following:**

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?
☑ **YES** ☐ **NO** **If no, give name of country**

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?
☑ **YES** ☐ **NO** **If no, give name of country**

11. Additional explanation on ownership *(Trace ownership from original breeder to current owner. Use the reverse for extra space if needed)*:

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.